【DESCRIPTION】

【Invention Title】

Conjugate of Biologically Active Polypeptide Monomer and ~~Immunoglobulin~~ Fc Fragment with Reduced Receptor-Mediated Clearance, and The Method for Preparing The Same

【Technical Field】

The present invention relates to: a long-acting pharmaceutical composition containing a conjugate comprising a physiologically active polypeptide linked to an immunoglobulin Fc fragment, wherein the composition contains a monomeric conjugate comprising one molecule of the physiologically active polypeptide linked to a single immunoglobulin Fc fragment, and optionally contains a multimeric conjugate comprising two or more molecules of the same physiologically active polypeptide linked to a single immunoglobulin Fc fragment, provided that the molar ratio of the monomeric conjugate to the multimeric conjugate in the composition is at least 19; a physiologically active polypeptide monomer-immunoglobulin Fc fragment conjugate that comprises a physiologically active polypeptide monomer linked via a non-peptidyl linker to an immunoglobulin Fc fragment, wherein the physiologically active polypeptide is linked via the non-peptidyl linker to the immunoglobulin Fc fragment in a monomeric form, the conjugate showing reduced receptor-mediated internalization or receptor-mediated clearance compared to either a dimeric conjugate comprising two molecules of the physiologically active polypeptide linked via the non-peptidyl linker to a single immunoglobulin Fc fragment, or a conjugate comprising a physiologically active polypeptide dimer linked in-frame to the immunoglobulin Fc fragment; and a method for preparing the long-acting pharmaceutical composition.

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【Invention Title】

Conjugate of Biologically Active Polypeptide Monomer and Immunoglobulin Fc Fragment with Reduced Receptor-Mediated Clearance, and The Method for Preparing The Same

【Technical Field】

The present invention relates to: a long-acting pharmaceutical composition containing a conjugate comprising a physiologically active polypeptide linked to an immunoglobulin Fc fragment, wherein the composition contains a monomeric conjugate comprising one molecule of the physiologically active polypeptide linked to a single immunoglobulin Fc fragment, and optionally contains a multimeric conjugate comprising two or more molecules of the same physiologically active polypeptide linked to a single immunoglobulin Fc fragment, provided that the molar ratio of the monomeric conjugate to the multimeric conjugate in the composition is at least 19; a physiologically active polypeptide monomer-immunoglobulin Fc fragment conjugate that comprises a physiologically active polypeptide monomer linked via a non-peptidyl linker to an immunoglobulin Fc fragment, wherein the physiologically active polypeptide is linked via the non-peptidyl linker to the immunoglobulin Fc fragment in a monomeric form, the conjugate showing reduced receptor-mediated internalization or receptor-mediated clearance compared to either a dimeric conjugate comprising two molecules of the physiologically active polypeptide linked via the non-peptidyl linker to a single immunoglobulin Fc fragment, or a conjugate comprising a physiologically active polypeptide dimer linked in-frame to the immunoglobulin Fc fragment; and a method for preparing the long-acting pharmaceutical composition.